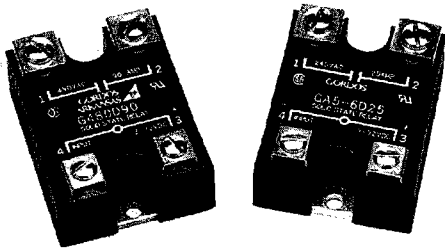


GORDOS

SOLID STATE RELAYS

G SERIES POWER RELAYS

- Back-to-back (dual) SCR output for severe inductive loads.
- Superior False turn-on immunity and positive turn-off at high dv/dt.

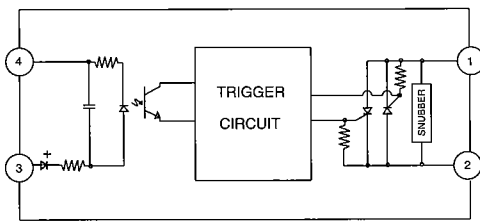


GA5 SERIES POWER RELAYS

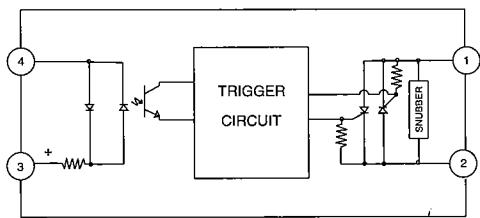
- Economical triac output for general purpose applications

FEATURES

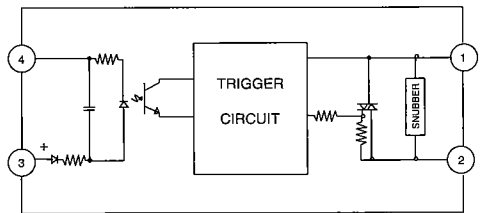
- Current ratings to 90A
- Output voltage rating to 660 VAC with 24 VAC minimum
- AC or DC inputs
- 4KV optical isolation
- Zero AC or random turn-on models
- RC snubber network for inductive loads
- UL recognized (E46203, E79183), CSA certified (38595)
- VDE approval on many models (37421)



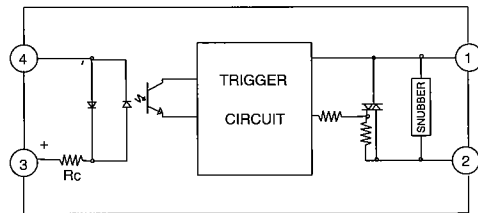
G SERIES AC INPUT
EQUIVALENT CIRCUIT



G SERIES DC INPUT
EQUIVALENT CIRCUIT



GA5 SERIES AC INPUT
EQUIVALENT CIRCUIT

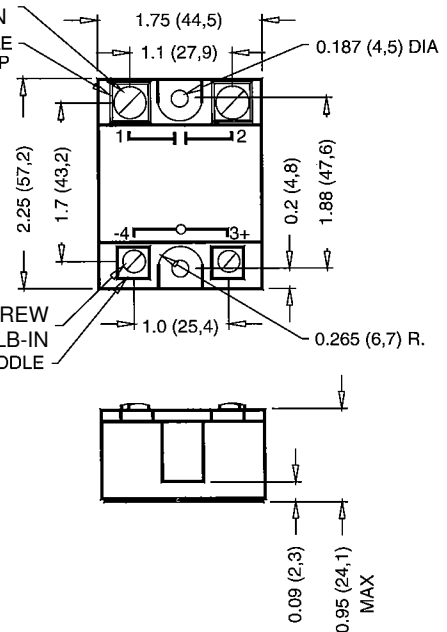


GA5 SERIES DC INPUT
EQUIVALENT CIRCUIT

8-32 PAN HEAD SCREW
RECOMMENDED TORQUE 17.8 LB-IN

LARGE SADDLE
CLAMP

6-32 PAN HEAD SCREW
RECOMMENDED TORQUE 8.7 LB-IN
SMALL SADDLE
CLAMP



DIMENSIONS: INCHES (MILLIMETERS)
TOLERANCE: ± 0.020 (± 0.50)

Products and specifications subject to change without notice.
Consult factory for application assistance.

GORDOS

SOLID STATE RELAYS

G, GA5 SERIES POWER RELAYS

G SERIES (1)

G SERIES (1)		MODEL NUMBER					Output Rating	Control Voltage
OUTPUT SPECIFICATIONS	G120A10	G240A10	G280A10	G480A10	G575A10	10A	90-280 VAC	
	G120A25	G240A25	G280A25	G480A25	G575A25	25A	90-280 VAC	
	G120A45	G240A45	G280A45			45A	90-280 VAC	
			G280A75	G480A50	G575A50	50A	90-280 VAC	
			G280A90	G480A75	G575A75	75A	90-280 VAC	
				G480A90	G575A90	90A	90-280 VAC	
	G120D10*	G240D10*	G280D10*	G480D10	G575D10	10A	3-32 VDC	
	G120D25*	G240D25*	G280D25*	G480D25	G575D25	25A	3-32 VDC	
	G120D45*		G280D45*			45A	3-32 VDC	
			G280D75	G480D50	G575D50	50A	3-32 VDC	
			G280D90	G480D75	G575D75	75A	3-32 VDC	
				G480D90	G575D90	90A	3-32 VDC	
	G120E10	G240E10	G280E10	G480E10	G575E10	10A	18-36 VAC	
	G120E25	G240E25	G280E25	G480E25	G575E25	25A	18-36 VAC	
	G120E45	G240E45	G280E45			45A	18-36 VAC	
		G280E75	G480E50	G575E50	50A	18-36 VAC		
		G280E90	G480E75	G575E75	75A	18-36 VAC		
			G480E90	G575E90	90A	18-36 VAC		
Maximum Line Voltage (VRMS)		140	250	280	480	660		
Minimum line voltage (Vrms)		24	24	24	36	48		
Max. off-state voltage (Vpeak) ²		±250	±500	±600	±1200	±1200		
Max. off-state leakage (mArms) ³		7.5	15.0	15.0	15.0	20.0		
Static (off-state) dv/dt (V/μs) ⁴		200	200	200	200	200		

Specify suffix "R" for random turn-on models.

GA5 SERIES (1)

GA5 SERIES (1)		MODEL NUMBER			Output Rating	Control Voltage
OUTPUT SPECIFICATIONS	GA5-2A10	GA5-4A10	GA5-6A10	10A	90-280 VAC	
	GA5-2A25	GA5-4A25	GA5-6A25	25A	90-280 VAC	
	GA5-2D10*	GA5-4D10*	GA5-6D10*	10A	3-32 VDC	
	GA5-2D25*	GA5-4D25*	GA5-6D25*	25A	3-32 VDC	
	GA5-2E10	GA5-4E10	GA5-6E10	10A	18-36 VAC	
	GA5-2E25	GA5-4E25	GA5-6E25	25A	18-36 VAC	
Maximum Line Voltage (VRMS)		140	250	280		
Minimum line voltage (Vrms)		24	24	24		
Max. off-state voltage (Vpeak) ⁽²⁾		±250	±400	±600		
Max. off-state leakage (mArms) ⁽³⁾		7.5	15.0	15.0		
Static (off-state) dv/dt (V/μs) ⁽⁴⁾		200	200	200		

Specify suffix "R" for random turn-on models.

*Specify suffix "V" for VDE approved models. (120, 250, 280 "D" input versions only)

Notes:

- (1) Specifications apply to TA from -30 to +80° C unless otherwise noted.
- (2) One minute maximum duration if applied as a DC voltage.
- (3) At TA of 25° C and maximum line voltage.
- (4) Minimum dv/dt per EIA/NARIM RS443, method RS397, 25° C.
- (5) G480D and G575D series DC input range is 4.0 to 32.0 VDC.

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GORDOS

SOLID STATE RELAYS

G, GA5 SERIES POWER RELAYS

INPUT SPECIFICATIONS (1)

Parameter	A	D	E
Control Voltage	90-280 VAC	3-32 VDC ⁽¹⁰⁾	18-36 VAC
Drop Out Voltage	10 Vrms	1.0 DC	2.0 Vrms
Maximum Input Current (2)	10 mArms	34 mADC	7 mArms
Nominal Input Resistance (3)	40K Ω	1K Ω	8K Ω
Turn-On Time (4)	20 mS	0.5 Cycle Max ⁽⁴⁾	20 mS
Turn-Off Time	30 mS	0.5 Cycle Max	30 mS

OUTPUT SPECIFICATIONS

Parameter	G Series						GA5 Series		Units
Maximum On-State Current (5)	10	25	45	50	75	90	10	25	Arms
Minimum On-State Current	100	100	100	100	100	100	50	50	mArms
Maximum 1-Cycle Surge (6)	100	250	500	750	750	1000	100	250	Apeak
Maximum 1-Second Surge (7)	30	75	135	145	200	280	30	75	Apeak
On-State Voltage Drop (8)	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	Vpeak
I _{RT} (60 Hz, Half Cycle)	200	260	1040	2345	2345	4165	40	260	A ² sec
R _{jb} (140, 250, 280, V Models)	1.8	1.8	0.65	-	0.25	0.25	3.0	2.0	°C/W
R _{jb} (480, 660V Models)	0.8	0.8	-	0.60	0.25	0.25	-	-	°C/W

GENERAL SPECIFICATIONS (1)

Parameter	All Devices	Units
Operating Temperature Range	-20 to +80	°C
Storage Temperature Range	-40 to +100	°C
Input to Output Isolation Voltage (9)	4000	Vrms
Input/Output to Ground Isolation Voltage	2500	Vrms
Capacitance Input to Output (Typical)	8	pF
Line Frequency Range	47 to 80	Hz

Notes:

- (1) Specifications apply to Ta -30 to +80° unless otherwise noted.
- (2) At maximum input voltage.
- (3) Does not include IRED impedance (drop).
- (4) At 60 Hz 100 μ s for random turn-on (suffix "R") models.
- (5) With relay properly mounted on an adequate heatsink. See thermal derating charts.
- (6) At Ta of 25° C, non-repetitive.
- (7) At Ta of 25° C.
- (8) At Ta of 25° C and maximum on-state current.
- (9) At TA of 25° C for one second, maximum leakage 1 MA.
- (10) Control voltage range for G480D and G575D series is 4.0 to 32.0 VDC.

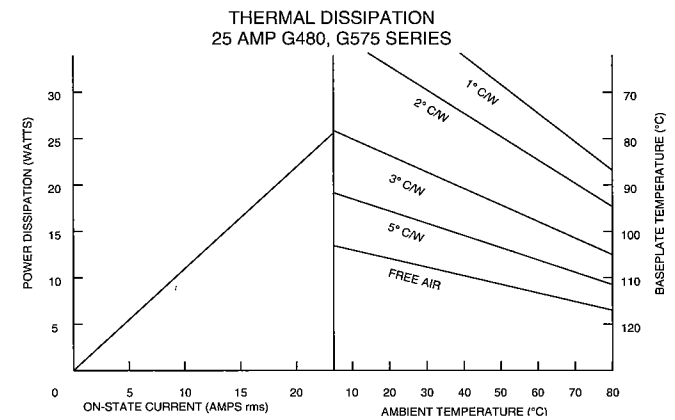
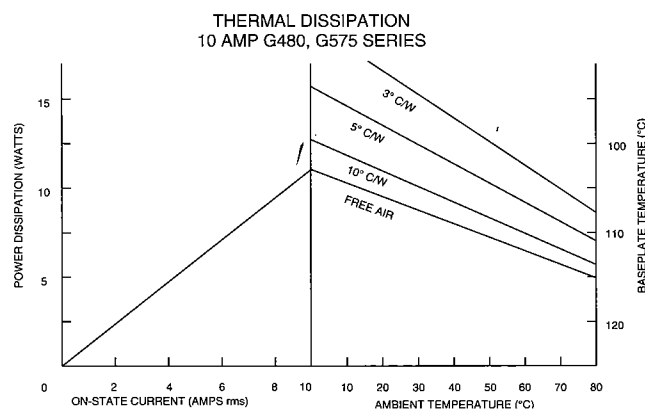
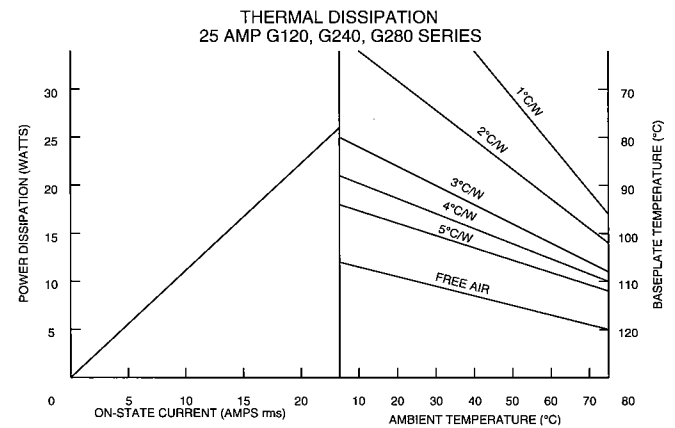
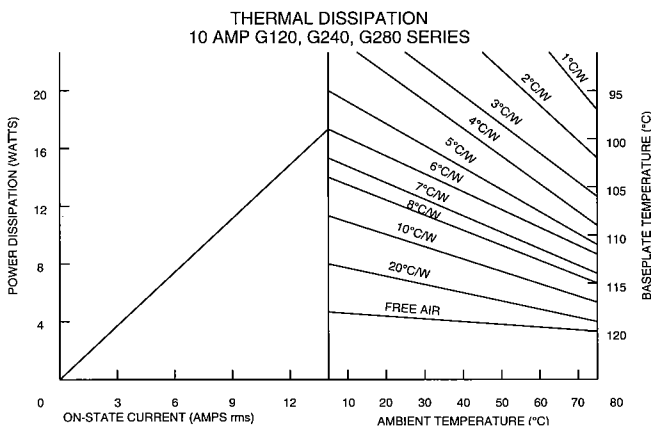
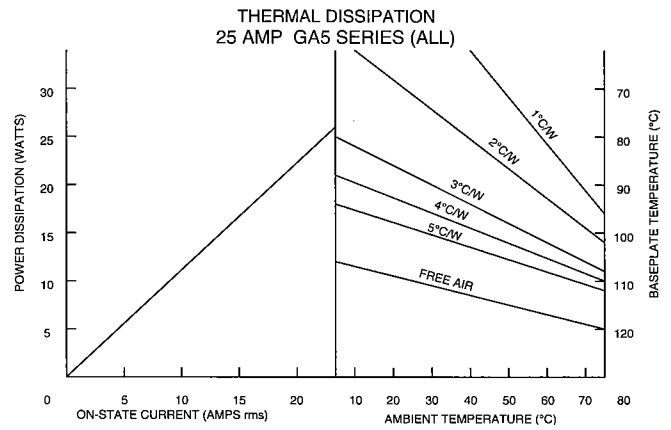
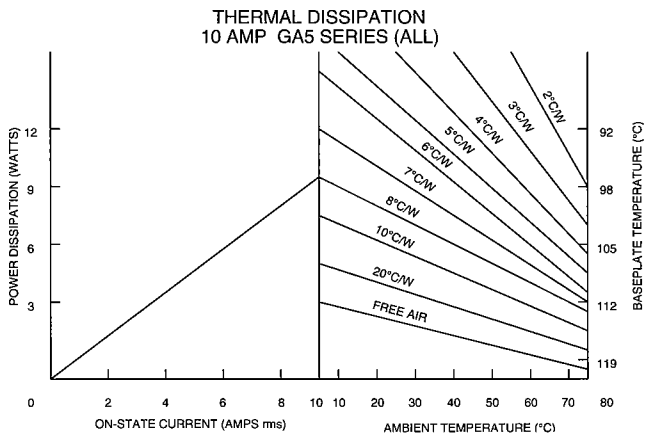
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GORDOS

SOLID STATE RELAYS

G, GA5 THERMAL DISSIPATION CURVES



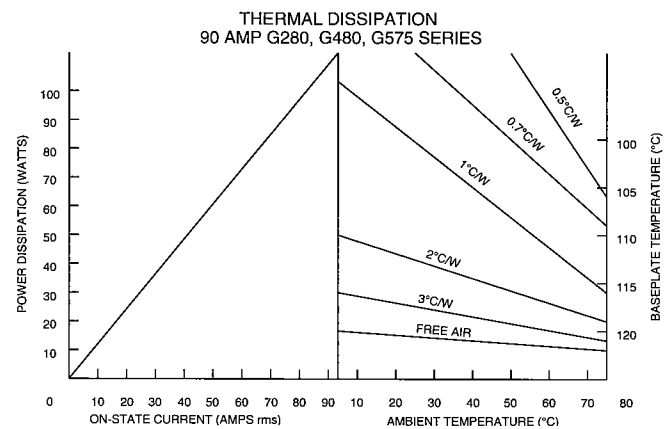
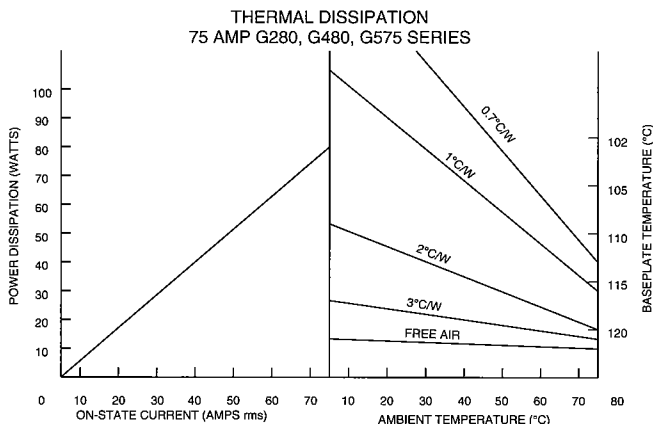
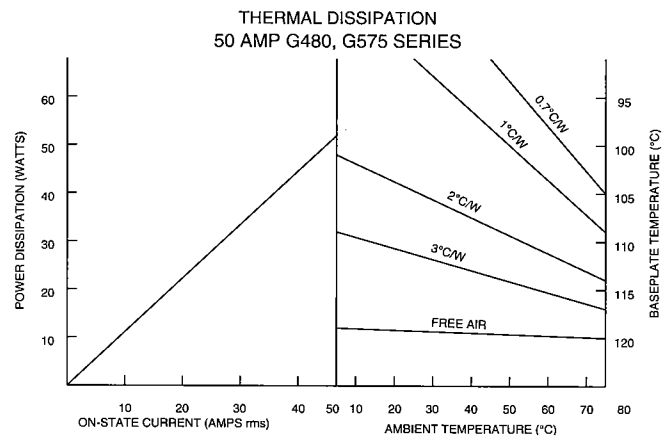
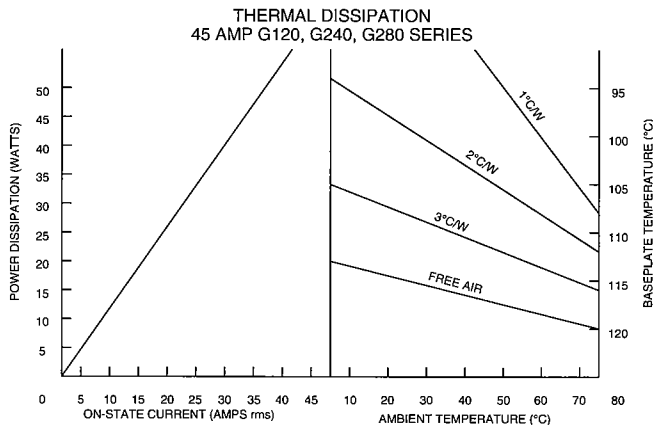
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GORDOS

SOLID STATE RELAYS

G, GA5 THERMAL DISSIPATION CURVES



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